



Cisco High Availability Features Roadmap

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This roadmap lists the features documented in the High Availability (HA) modules and maps the features to the modules in which they appear.

Feature and Release Support

Table 1 lists the DHCP feature support for the following Cisco IOS software release trains:

- [Cisco IOS XE 3SG](#)
- [Cisco IOS Release 15.0S](#)
- [Cisco IOS Release 12.2SX](#)
- [Cisco IOS Release 12.2SR](#)
- [Cisco IOS Release 12.2SB](#)
- [Cisco IOS Release 12.2S](#)
- [Cisco IOS Release 12.0S](#)

Use Cisco Feature Navigator to find information about platform support and Cisco IOS and Catalyst OS software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.



Note

Table 1 lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Table 1 Supported Cisco IOS High Availability Features

| Release | Feature Name | Where Documented |
|--------------------------------|--------------------------|--|
| Cisco IOS Release 12.0S | | |
| 12.0(22)S | Cisco Nonstop Forwarding | Cisco Nonstop Forwarding |
| | Stateful Switchover | Stateful Switchover |



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Table 1 Supported Cisco IOS High Availability Features (continued)

| Release | Feature Name | Where Documented |
|---------------------------------|---|---|
| 12.0(28)S | SSO - Multilink Frame Relay | Stateful Switchover |
| Cisco IOS Release 12.2S | | |
| 12.2(18)S | Cisco Nonstop Forwarding | Cisco Nonstop Forwarding |
| | Stateful Switchover | Stateful Switchover |
| 12.2(25)S | NSF/SSO—MPLS VPN | NSF/SSO and ISSU - MPLS VPN |
| | <ul style="list-style-type: none"> • SSO - Multilink Frame Relay • SSO - QoS | Stateful Switchover |
| Cisco IOS Release 12.2SB | | |
| 12.2(28)SB | Cisco Nonstop Forwarding | Cisco Nonstop Forwarding |
| | In Service Software Upgrade | Cisco IOS In Service Software Upgrade Process |
| | NSF/SSO—MPLS VPN | NSF/SSO and ISSU - MPLS VPN |
| | Stateful Switchover | Stateful Switchover |
| 12.2(31)SB2 | ISSU - Quality of Service (QoS) | Cisco IOS In Service Software Upgrade Process |
| | <ul style="list-style-type: none"> • Dynamic Host Configuration Protocol (DHCP) On Demand Address Pool (ODAP) client/server • SSO - DHCP proxy client • SSO - DHCP relay on unnumbered interface • SSO - DHCP server • SSO - Gateway Load Balancing Protocol (GLBP) • SSO - Multilink Frame Relay • SSO - PPPoA • SSO - PPPoE | Stateful Switchover |
| 12.2(33)SB | SNMP support for ISSU | Cisco IOS In Service Software Upgrade Process |
| | SSO - BFD (Admin Down) | Stateful Switchover |
| Cisco IOS Release 12.2SR | | |
| 12.2(33)SRA | Cisco Nonstop Forwarding | Cisco Nonstop Forwarding |
| | NSF/SSO—MPLS VPN | NSF/SSO and ISSU - MPLS VPN |
| | Stateful Switchover | Stateful Switchover |
| 12.2(33)SRB | <ul style="list-style-type: none"> • SSO - Multilink Frame Relay • SSO - PPP | Stateful Switchover |

Table 1 Supported Cisco IOS High Availability Features (continued)

| Release | Feature Name | Where Documented |
|----------------------------------|--|---|
| 12.(33)SRB1 | <ul style="list-style-type: none"> • ISSU - ARP • ISSU - ATM • ISSU - Frame Relay • ISSU - GLBP • ISSU - HDLC • ISSU - HSRP • ISSU - IS-IS • ISSU - PPP/MLP • ISSU - QoS • ISSU - RIB/VRF • ISSU - SNMP | Cisco IOS In Service Software Upgrade Process |
| 12.2(33)SRC | <ul style="list-style-type: none"> • CEM SSO/ISSU • ISSU - Virtual template manager | Cisco IOS In Service Software Upgrade Process |
| | <ul style="list-style-type: none"> • CEM SSO/ISSU • SSO - DHCP proxy client • SSO - VRRP • Virtual template manager SSO | Stateful Switchover |
| 12.2(33)SRE | NSF/SSO - IPv6 Multicast | <ul style="list-style-type: none"> • Cisco Nonstop Forwarding • Stateful Switchover |
| Cisco IOS Release 12.2SX | | |
| 12.2(33)SXH | NSF/SSO—MPLS VPN | NSF/SSO and ISSU - MPLS VPN |
| | <ul style="list-style-type: none"> • SSO - GLBP • SSO - HSRP | Stateful Switchover |
| 12.2(33)SXI4 | NSF/SSO - Virtual Private LAN services | NSF/SSO/ISSU Support for VPLS |
| Cisco IOS Release 12.2XNE | | |
| 12.2(33)XNE | ISSU - MPLS VPN 6VPE and 6PE ISSU support | NSF/SSO and ISSU - MPLS VPN 6VPE and 6PE |
| Cisco IOS Release 15.0S | | |
| 15.0(1)S | ISSU - 802.3ah OAM Support | Using Ethernet Operations, Administration, and Maintenance |
| | ISSU - AToM ATM Attachment Circuit | Any Transport over MPLS and AToM Graceful Restart |

Table 1 Supported Cisco IOS High Availability Features (continued)

| Release | Feature Name | Where Documented |
|----------|---|--|
| 15.0(1)S | <ul style="list-style-type: none"> • ISSU - ATM • ISSU - DHCP ODAP Client/Server • ISSU - DHCP Proxy Client • ISSU - DHCP Relay on Unnumbered Interface • ISSU - DHCP Server • ISSU - Frame Relay • ISSU - IS-IS | Cisco IOS In Service Software Upgrade Process |
| | ISSU- E-LMI Support | Configuring Ethernet Local Management Interface at a Provider Edge |
| | ISSU- IPv4 Multicast | <ul style="list-style-type: none"> • Monitoring and Maintaining Multicast HA Operations (NSF/SSO and ISSU) • Cisco IOS In Service Software Upgrade Process |
| | ISSU - PPPoE | Cisco IOS Broadband High Availability In Service Software Upgrade |
| | ISSU- Virtual Private LAN Service (VPLS) | NSF/SSO/ISSU Support for VPLS |
| | ISSU- VRRP | Configuring VRRP |
| | NSF - Graceful Restart (GR) and Non Stop Routing (NSR) for IS-IS | Cisco Nonstop Forwarding |
| | NSF - OSPF | Cisco Nonstop Forwarding |
| | NSF/SSO - 802.3ah OAM Support | Using Ethernet Operations, Administration, and Maintenance |
| | NSF / SSO - Any Transport over MPLS (AToM) | Any Transport over MPLS and AToM Graceful Restart |
| | NSF/SSO - E-LMI Support | Configuring Ethernet Local Management Interface at a Provider Edge |
| | NSF/SSO - IPv4 Multicast | <ul style="list-style-type: none"> • Monitoring and Maintaining Multicast HA Operations (NSF/SSO and ISSU) • Cisco Nonstop Forwarding • Stateful Switchover |
| | NSF/SSO (Nonstop Forwarding with Stateful Switchover) | Cisco Nonstop Forwarding |

Table 1 Supported Cisco IOS High Availability Features (continued)

| Release | Feature Name | Where Documented |
|-------------------------|--|---|
| 15.0(1)S | NSF/SSO - Virtual Private LAN Services | NSF/SSO/ISSU Support for VPLS |
| | <ul style="list-style-type: none"> • SSO - HDLC • SSO - HSRP • SSO - Multilink Frame Relay • SSO - Multilink PPP • SSO - Multilink PPP (MLP) • SSO - QoS • SSO - VRRP | Stateful Switchover |
| Cisco IOS XE 3SG | | |
| Cisco IOS XE 3.1.0SG | <ul style="list-style-type: none"> • ISSU • ISSU - IS-IS | Cisco IOS In Service Software Upgrade Process |
| Cisco IOS XE 3.1.0SG | SSO - HSRP | Stateful Switchover |

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